

CLAIMS

1. Cutting device of a rotary cutting machine (1),
said cutting device (4) comprising:
 - 5 - a gearbox (8) consisting of an upper part (26),
a lower part (27) and a front piece (28), said
front piece (28) having a thickness greater than
the thickness of said upper part (26),
 - 10 - at least one guide bearing (10) connected to
said gearbox (8) by means of assembly elements
(29), and
 - 15 - at least one cutting member (9) connected to
said gearbox (8) by means of said guide bearing
(10), said cutting member (9) being driven in
rotation during work about an upwardly directed
axis (12),
characterized in that at least one assembly
element (29) intended to connect said guide
bearing (10) to said gearbox (8) is anchored in
20 said front piece (28) of increased thickness.
2. Cutting device as claimed in claim 1,
characterized in that said upper part (26) and
said lower part (27) have substantially the same
25 thickness.
3. Cutting device as claimed in claim 1 or 2,
characterized in that said upper part (26) and
said lower part (27) are joined together at the
30 front of said gearbox (8) by means of said front
piece (28).
4. Cutting device as claimed in any one of claims 1
to 3, **characterized in** that said upper part (26)
35 and said lower part (27) are joined together
directly at the rear of said gearbox (8).
5. Cutting device as claimed in any one of claims 1
to 4, **characterized in** that said upper part (26)

and said lower part (27) are made of one and the same metal sheet.

- 5 6. Cutting device as claimed in any one of claims 1 to 5, **characterized in** that said upper part (26), said lower part (27) and said front piece (28) are connected together by welding in such a manner as to create a sealed gearbox (8).
- 10 7. Cutting device as claimed in any one of claims 1 to 6, **characterized in** that said gearbox (8) encloses transmission elements (21, 25) intended to drive said cutting member (9) in rotation about said axis (12).
- 15 8. Cutting device as claimed in any one of claims 1 to 7, **characterized in** that said guide bearing (10) is removably connected to said gearbox (8).
- 20 9. Cutting device as claimed in any one of claims 1 to 8, **characterized in** that said guide bearing (10) is arranged above said gearbox (8).
- 25 10. Cutting device as claimed in any one of claims 1 to 9, **characterized in** that said assembly element (29) anchored in said front piece (28) is made by means of a pin (30) comprising a first threaded part (31) and a second threaded part (32).
- 30 11. Cutting device as claimed in claim 10, **characterized in** that said first threaded part (31) is intended to be screwed into a tapping (33) made in said front piece (28).
- 35 12. Cutting device as claimed in claim 10 or 11, **characterized in** that said first threaded part (31) passes through a hole made in said upper part (26) of said gearbox (8).

13. Cutting device as claimed in any one of claims 10 to 12, **characterized in** that said pin (30) comprises a collar (38) arranged between said first threaded part (31) and said second threaded part (32), and that said pin (30) additionally comprises a shoulder (39) arranged between said collar (38) and said first threaded part (31).
14. Cutting device as claimed in claim 13, **characterized in** that an O-ring (37) is provided, said O-ring (37) being slightly flattened during mounting between said collar (38), said front piece (28), said shoulder (39) and said upper part (26).
15. An agricultural mower, **characterized in** that it comprises a cutting device (4) as claimed in any one of claims 1 to 14.